

I claim:

1. A musical instrument comprising:

an elongated unitary neck and body adapted for stringed play;

5 at least one support arm coupled to the unitary neck and body and extending to at least one side thereof; and
at least one side panel coupled to the support arm.

2. The musical instrument according to claim 1 wherein said instrument is a guitar.

10 3. The guitar according to claim 2 wherein a heel is provided at the junction of the neck and body.

4. The guitar according to claim 3 wherein a heel plate corresponding to a like segment of the side of the resonating body of an acoustic guitar of conventional design is affixed to the heel or is received within a slot provided within the heel.

15 5. The musical instrument according to claim 1 wherein the support arm is releasably coupled to the unitary neck and body and the side panel is releasably coupled to the support arm.

20 6. The musical instrument according to claim 1 wherein the support arm extends to both sides of the unitary neck and body and is coupled at each of its ends to a side panel corresponding to a segment of one of the opposing side of the resonating body of an acoustic instrument of conventional design.

25 7. The musical instrument according to claim 1 wherein the side panel comprises a curved panel corresponding to a segment of the side of the resonating body of an acoustic instrument of conventional design, which panel is provided with an edge corresponding to a contiguous portion of the top face of the resonating body of said conventionally designed instrument.

30 8. The musical instrument according to claim 1 wherein the side panel comprises a curved panel corresponding to a segment of the side of the resonating body of an acoustic instrument of conventional design, which panel is provided with an edge corresponding to a contiguous portion of the bottom face of the resonating body of said conventionally designed instrument.

9. A musical instrument according to claim 6, wherein:

the support arm is releasably coupled to the unitary neck and body,

a first side panel is releasably coupled to the support arm at a first end of said arm
and,
a second side panel is releasably coupled to the support arm at a second end of said
arm.

5 10. The musical instrument according to claim 9 wherein a bottom brace is
releasably coupled between the bottoms of the opposing side panels.

11. The musical instrument according to claim 1 wherein the adaptation for stringed
play includes a string tensioning system rigidly coupled to the underside of the body.

10 12. The musical instrument according to claim 11 wherein the string tensioning
system is spaced apart from the body.

13. The musical instrument according to claim 11 wherein the string-path reverser is
disposed at the proximal end of the body to guide the strings over the end of the body and
to the string tensioning system.

15 14. The musical instrument according to claim 1 wherein adaptation for stringed
play is provided by the addition of:
a fingerboard;
a string tie block for securing the strings near the distal end of the neck;
a nut, disposed proximal to the tie block, for determining the distal end of the active
portions of the strings;
20 a slotted bridge, affixed to the top of the proximal end of body;
a saddle received within the bridge slot; and
an acousto-electric transducer for conversion of string vibrations to electrical waves
suitable for electronic amplification and sound reproduction.

25 15. The musical instrument according to claim 14 wherein the acoustic-to-electric
transducer is a piezoelectric pickup received within the bridge slot under saddle.

16. The musical instrument according to claim 15 further including a strip flexible
material disposed between the saddle and the pickup or between the pickup and the
bottom of the bridge slot.

30 17. The musical instrument according to claim 14 wherein the slotted bridge further
includes a string guide proximal to the bridge slot to constrain the strings to spaced apart
paths.

18. The musical instrument according to claim 11 wherein the support arm is coupled to the unitary neck and body by a releasable attachment to the distal end of the string tensioning system.

19. The musical instrument according to claim 11 wherein the coupler by which the support arm is releasably coupled to the side panel comprises:

a block affixed to the inner surface of the side pane, said block provide with a captive nut accessible at its surface and a thumbscrew partially engaged with said nut; and

A keyhole-shaped aperture in the support arm wherein one end of the keyhole is adapted to received the head of the thumbscrew and the other to receive the threaded shank of the thumbscrew.

20. The musical instrument according to claim 13 wherein the string-path reverser comprises a plurality of pulleys or rollers on a common axle and secured within a frame.

21. A method of configuring for use a stringed musical instrument comprising at least a unitary neck and body, two side panels, and at least one support arm, comprising the steps of:

coupling the support arm to the unitary neck and body;
coupling a first side panel to a first end of the support arm; and
coupling a second side panel to a second end of the support arm.

22. A method of configuring for use the musical instrument of claim 21, comprising the steps of claim 21 and the additional steps of coupling a first end of a bottom brace to the bottom end of a first side panel and coupling the opposite end of said bottom brace to the bottom of a second side panel.

23. A musical instrument according to claim 1 wherein:

a first support arm is pivotally coupled to and disposed on a first side of the unitary neck and body and is releasably coupled to a first side panel; and,
a second support arm is pivotally coupled to and disposed on a second side of the unitary neck and body and is releasably coupled to a second side panel.

24. The musical instrument according to claim 23 further including:

rotational stops to establish the deployed position of each support arm; and

a tensioning bottom-closure device which, when connected between the bottoms of the side panels, applies a force between the panels that is reflected to the pivoting support arms, holding them against their respective rotational stops.

25. A method of configuring for use a stringed musical instrument comprising at least a unitary neck and body, two side panels, and a first and second support arm pivotally coupled to the unitary neck and body, comprising the steps of:

moving the first and second support arms from their stowed positions to their deployed positions;

coupling a first side panel to a first support arm; and

coupling a second side panel to a second support arm.

26. A method of configuring for use the musical instrument of claim 25, comprising the steps of claim 25 and the additional steps of coupling a first end of a tensioning bottom-closure device to the bottom end of a first side panel and coupling the opposite end of said bottom-closure device to the bottom of a second side panel.

27. A musical instrument according to claim 1 wherein the support arm is pivotally coupled at a first end to the unitary neck and body and pivotally coupled at a second end to a side panel, so as to permit the side panel to be deployed for use or drawn close to the unitary neck and body for storage.

28. A stringed musical instrument lacking a resonant body, which instrument incorporates an acousto-electric transducer and electronic signal processing circuits for amplification of the signals and for alteration of their temporal and spectral characteristics in a manner that approximates the effect of a resonant body.

29. The stringed musical instrument according to claim 28 wherein the electronic signal processing circuits include a plurality of filters the outputs of which are summed.

30. The stringed musical instrument according to claim 29 wherein at least one of the filters is a band-pass filter.

31. A stringed musical instrument incorporating an electronic tuning aid.

32. A stringed musical instrument incorporating metronome.

33. A musical instrument incorporating an acousto-electric transducer and electronic signal processing circuits and means for accepting an external electrical signal and superposing it with the instrument-generated signal.